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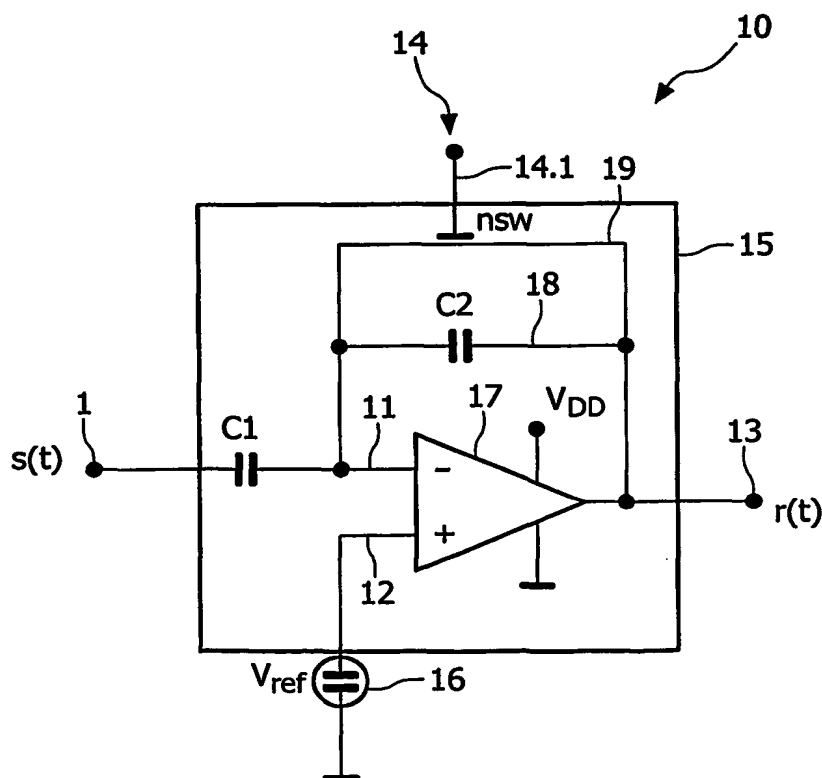
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(54) Title: **INPUT STAGE RESISTANT AGAINST NEGATIVE VOLTAGE SWINGS**



(57) Abstract: Apparatus (10) comprising a level shifter (15) connectable to a signal input (1) for receiving an input signal (s(t)) with a negative signal swing. The level shifter (15) provides for a DC shift of the input signal (s(t)) to provide an output signal (r(t)) with positive signal swing. The level shifter (15) comprises an amplifier (17) with a first input (11), a second input (12), and an output (13). A first capacitor (C1), a second capacitor (C2), a reference voltage supply (16), and a transistor (14; 74) serving as a switch, are arranged in a network as follows: the first capacitor (C1) is arranged between the signal input (1) and the first input (11), the second capacitor (C2) is arranged in a feedback-loop (18) between the output (13) and the first input (11), and the reference voltage supply (16) is connected to the second input (12). The transistor (14) is arranged in a branch (19) that bridges the second capacitor (C2), whereby a control signal (CNTRL) is applicable to a gate (14.1) of the transistor (14) in order to allow the level shifter (15) to be reset from time to time.

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